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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,095	03/06/2002	Brian Bates	8627-051	8504

7590 03/31/2005
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EXAMINER

WEBB, SARAH K

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

871

Office Action Summary	Application No. 10/092,095	Applicant(s) BATES, BRIAN	
	Examiner Sarah K Webb	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-19, 21, 22, 24-34 and 36-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-19, 21, 22, 24-34 and 36-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3,9-13,21,22,24, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,951,599 to McCrory.

McCrory discloses a stent frame that has a uniform circumference and a partial graft in Figure 2A. A graft (22) is disposed over a portion of the frame (20) that extends only a portion of the length of the frame and a portion of the circumference of the frame. The graft extends *approximately* $\frac{1}{2}$ of the circumference. McCrory states that the graft material is an impermeable polymer that is attached to the frame by various attachment means (column 4, lines 14-19). Regarding claim 10, the graft can be woven into the frame wires, and this is considered to meet the limitation “embedded.”

2. Claims 1-3,8-13,21,22,24,28,29, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent App. Pub. No. 2003/0139802 (Wulfman et al.).

Wulfman discloses a stent frame that defines a uniform circumference and a plurality of cells. As shown in Figure 3, a partial graft (28) is disposed over

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approximately ½ of the circumference of the frame (26) and extends the entire length of the frame. Figure 6 shows that the graft can extend only a portion of the stent length. Wulfman states that the graft material (28) is an impermeable polymer material that is attached to the frame by various attachment means (0033). Regarding claim 10, the frame can be "embedded" between inner and outer layers of the graft material [0035]. The stent-graft can be deployed by a balloon catheter [0038-0039] to occlude an aneurysm.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4-7, 18, 19, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wulfman in view of US Patent No. 6,080,191 to Summers.

As explained above, Wulfman includes many limitations of the claims, but fails to form the stent frame according to claims 4-7, 18, 19, and 30-34. Wulfman teaches, *"Stents having a variety of pore structures and shapes are well know in the art and may be adapted for use in the medical devices of the present invention"* (0028). Summers discloses several stent patterns in Figures 1-5 and 21 that meet many limitations of the claims. The embodiment of the stent in Figures 1-5 is formed from a single wire (column 3, line 65), has ring segments joined by curved regions, and adjacent rings are interleaved. The embodiment in Figure 21 has a longitudinal support. It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to use a stent frame of Summers as the support frame in the Wulfman device, as this is simply an equivalent substitute for the mesh disclosed by Wulfman.

4. Claims 15-17 and 25-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Wulfman in view of US Patent No. 6,464,720 to Boatman et al.

Wulfman fails to include three radiopaque markers adjacent to the edge of the graft material. The edge of the graft material is at the edge of the stent frame, so radiopaque markers at the edge of the stent frame would meet this limitation.

Boatman discloses a wire frame stent. Boatman teaches that it is particularly useful to have three radiopaque markers positioned at both the proximal and distal ends of the stent so that it can be clearly viewed to determine its exact location (column 19, lines 21-67). As shown in Figure 28, three radiopaque markers (102,103,104) are located at the edge of the stent frame. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include three radiopaque markers at the edge of the Wulfman stent frame, as Boatman teaches that this arrangement of radiopaque markers aids in the determination of the exact location of the stent in the body.

Response to Arguments

5. Applicant's arguments, see pages 7-9, filed 3/15/05, with respect to the 102 and 103 rejection(s) of the claim(s) under Avellanet, Deem, and Summers have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of McCrory and Wulfman.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah K Webb whose telephone number is (571) 272-4706. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKW
3/25/05

SKW

Julian W. Woo

JULIAN W. WOO
PRIMARY EXAMINER